IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Previously presented) An intelligent digital broadcast scheduling system, said scheduling system arbitrating the use of specified broadcast time slots, said broadcast comprising data content including one or more of audio, video, text, graphics, images, or data, said scheduling system comprising:

an arbitrator, said arbitrator determining relative levels of data content based upon priority indicators, service categories, and service classes of data content received from a plurality of content providers; and

a scheduler, said scheduler sequencing said data content for broadcast based on said arbitrator determinations of relative levels of data content; and

an in-band on-channel (IBOC) transmitter broadcasting said data content based upon said sequencing.

2.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said system comprises a hierarchy of gateways, one or more first level gateways arbitrating and scheduling a first data content level and one or more second level gateways operatively connected to said first level gateway(s) and arbitrating and scheduling a second data content level.

3.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 2, wherein said one or more first level gateways arbitrating and scheduling a

first data content level comprise at least a central gateway receiving requests from a the plurality of content providers.

4.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 2, wherein said one or more second level gateways receive requests from a plurality of local content providers.

5.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said data content is arbitrated based on a plurality of the following parameters: content type, transmission requirements, data type, time, end user device requirements.

6.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said data content is prioritized, based on said priority indicators, as one of the following: extreme high priority for immediate data transmission, high priority for transmission at earliest opportunity, normal according to requested repetition rate, and low for transmission in slots left free after transmission of messages of extreme high priority, high priority, and normal priority.

7.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said priority indicators comprise one or more of the following fields: level of service, bit rate requirements, latency grades, or best effort required.

8. (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon a service operator code identifying said data content provider.

9. (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon a destination address representing a broadcast, multicast, or unicast scenario.

10. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said service classes comprise at least basic, preferred, or premium.

11. (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said service categories comprise at least one, or a combination of: administrative, maintenance, advertisement, news, sports, weather, traffic, emergency alert, stocks, entertainment, travel entities, medical, multimedia, audio, logo, or text.

12. (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon language filtration identifiers.

13. (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon periodicity requirements.

14.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon validity determinations including periods of validity.

15.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon time stamps of said data content.

16.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 14, wherein said arbitrator determinations are further based upon periodicity requirements.

17.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said arbitrator determinations are further based upon geographic classifications.

18.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 1, wherein said scheduler processes data for controlling display of information at a receiver.

19.   (Previously presented) An intelligent digital broadcast scheduling system, said scheduling system arbitrating the use of specified broadcast time slots, said broadcast comprising data content including one or more of audio, video, text, graphics, images, or data, said scheduling system comprising:

one or more gateways receiving data content from a plurality of data content

providers;

an arbitrator, said arbitrator determining relative levels of data content

based upon priority indicators, service categories and service classes of data content

providers;

a scheduler, said scheduler sequencing said data content for broadcast

based on said arbitrator determinations of relative levels of data content, and

an in-band on-channel (IBOC) transmitter broadcasting said data content

based upon said sequencing.

20.   (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein

said system comprises a hierarchy of gateways, one or more first level gateways

arbitrating and scheduling a first data content level and one or more second level

gateways operatively connected to said first level gateway(s) and arbitrating and

scheduling a second data content level.

21.   (Previously presented) An intelligent digital broadcast scheduling system, as per

claim 20, wherein said one or more first level gateways arbitrating and scheduling a

first data content level comprise at least a central gateway receiving requests from a

plurality of content providers.

22.   (Previously presented) An intelligent digital broadcast scheduling system, as per

claim 20, wherein said one or more second level gateways receive requests from a

plurality of local content providers.

23.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said data content is arbitrated based on a plurality of the following parameters: content type, transmission requirements, data type, time, end user device requirements.

24.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said data content is prioritized, based on said priority indicators, as one of the following: extreme high priority for immediate data transmission, high priority for transmission at earliest opportunity, normal according to requested repetition rate, and low for transmission in slots left free after transmission of messages of extreme high priority, high priority, and normal priority.

25.   (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said priority indicators comprise one or more of the following fields: level of service, bit rate requirements, latency grades, best effort required.

26.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon a service operator code identifying said data content provider.

27.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon a receiver destination address representing a broadcast, multicast or unicast scenario.

28.   (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said service classes comprise at least basic, preferred, or premium.

29.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said service categories comprise at least one, or a combination of: administrative, maintenance, advertisement, news, sports, weather, traffic, emergency alert, stocks, entertainment, travel entities, medical, multimedia, audio, logo, or text.

30.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon language filtration identifiers.

31.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon periodicity requirements.

32.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon validity determinations including periods of validity.

33.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon time stamps of said data content.

34.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 32, wherein said arbitrator determinations are further based upon periodicity requirements.

35.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said arbitrator determinations are further based upon geographic classifications.

36.   (Previously presented) An intelligent digital broadcast scheduling system, as per claim 19, wherein said scheduler processes data for controlling display of information at a receiver.

37.   (Currently amended) A method for intelligently scheduling digital broadcast data content, comprising the steps of:

        determining relative levels of data content based upon priority indicators, service categories, and service classes of said data content;

        sequencing said data content for broadcast based upon said determining of relative levels of data content; and

        communicating said data content to an in-band on-channel (IBOC) network for digital radio broadcast transmission in accordance with said sequencing.

38.   (Currently amended) A digital broadcast scheduling system, comprising:

        a computer processing system; and

a memory, wherein the computer processing system is configured to execute

the steps of:

determining relative levels of data content based upon priority indicators,

service categories, and service classes of said data content;

sequencing said data content for broadcast based upon said determining of

relative levels of data content; and

communicating said data content to an in-band on-channel (IBOC) network

for digital radio broadcast transmission in accordance with said sequencing.

39.   (Currently amended) A computer readable medium having embodied therein

computer instructions adapted for scheduling digital broadcast data content, said

instructions being adapted to cause a computer processing system to execute steps of:

determining relative levels of data content based upon priority indicators,

service categories, and service classes of said data content;

sequencing said data content for broadcast based upon said determining of

relative levels of data content; and

communicating said data content to an in-band on-channel (IBOC) network

for digital radio broadcast transmission in accordance with said sequencing.